

WHAT IS CLAIMED IS:

1. A control unit for an electric power steering apparatus that controls a motor for giving steering assist force to a steering mechanism based on a current control value calculated from a steering assist command value calculated based on the steering torque generated in the steering shaft, and a current value of the motor, wherein the control unit comprises a current dither signal generating unit for generating a current dither signal when the motor angular velocity is within a predetermined range of an angular speed ω , and for adding the current dither signal to the steering assist command value.
2. The control unit for an electric power steering apparatus according to Claim 1, wherein the predetermined value is the angular velocity ω of the motor corresponding to the static friction.
3. The control unit for an electric power steering apparatus according to Claim 2, wherein the current dither signal is expressed as $K \cdot \sin \omega_0 t$, where K is a constant and ω_0 represents a dither angular frequency.
4. The control unit for an electric power steering apparatus according to Claim 3, wherein the dither angular frequency ω_0 is a range of 30-50 Hz.
5. The control unit for an electric power steering apparatus

according to Claim 4, wherein the dither angular frequency ω_0 is 40 Hz.

6. The control unit for an electric power steering apparatus according to Claim 1, wherein the angular velocity ω is obtained at a motor angular velocity estimating section which inputs a motor terminal voltage and a motor current.